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10/702,557	11/07/2003	Kang Soo Seo	1740-000026/US	8241

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HARNESS, DICKEY & PIERCE, P.L.C.
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RESTON, VA 20195

EXAMINER

FINDLEY, CHRISTOPHER G

ART UNIT	PAPER NUMBER
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2621

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06/25/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/702,557	Applicant(s) SEO ET AL.	
	Examiner CHRISTOPHER FINDLEY	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 and 32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 and 32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/06/2009, 4/23/2009, 5/20/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Examiner notes that the claimed foreign priority has not been perfected because no English translation of the foreign priority documents has been received by the Office.

Response to Arguments

2. Applicant's arguments with respect to claims 1-30 and 32 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 12, 13, 14, and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US 20040068606 A1, hereinafter referred to as “Kim”).

Re **claim 1**, Kim discloses a computer readable medium having a data structure for managing reproduction of video data having at least one reproduction path recorded on the computer readable medium, comprising: a data area for storing stream files, each stream file including video data, each stream file associated with one of a portion

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common to the reproduction paths and a particular reproduction path among the reproduction paths of the video data (Kim: Fig. 4; paragraphs [0028]-[0029]); a playlist area storing a playlist file, the playlist file for identifying the common reproduction path portions and the particular reproduction path to reproduce, the playlist file including at least one playitem, each playitem indicating a playing interval from in-point until out-point, the in-point and out-point pointing to time positions on a time axis of the video data (Kim: Fig. 4; paragraphs [0028] and [0030]); and a clip information area for storing management information for managing reproduction of the video data, the management information including clip information files, each one of the clip information files being associated with a corresponding stream file, each clip information file including a map for the associated stream file, the map mapping a presentation time stamp to a source packet address for an entry point of the associated stream file, the clip information file, the playlist file and the stream file being logically separate and including different file extensions (Kim: Fig. 4; paragraphs [0028]-[0029]).

Claim 12 recites the corresponding recording method implemented by the apparatus and computer readable medium of claim 1. Kim discloses that recording steps are performed (Kim: Fig. 6, steps S14, S17, and S20). Additionally, arguments analogous to those presented in claim 1 are applicable to claim 12. Therefore, claim 12 has been analyzed and rejected with respect to claim 1 above in view of Kim's Fig. 6.

Claim 13 recites the corresponding reproducing method implemented by the apparatus and computer readable medium of claim 1. Kim discloses that reproducing steps are performed (Kim: Fig. 6, steps S12, S15, S30, and S31 indicate a read

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operation). Additionally, arguments analogous to those presented in claim 1 are applicable to claim 13. Therefore, claim 13 has been analyzed and rejected with respect to claim 1 above in view of Kim's Fig. 6.

Claim 14 recites the corresponding apparatus for implementing the method of claim 12. Therefore, claim 14 has been analyzed and rejected with respect to claim 12 above.

Claim 15 recites the corresponding apparatus for implementing the method of claim 13. Therefore, claim 15 has been analyzed and rejected with respect to claim 13 above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 2, 3, 16-19, 22, 25, 28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 20040068606 A1) in view of Kaneshige et al. (US 6360055 B1, hereinafter referred to as "Kaneshige").**

Re **claim 2**, Kim does not specifically disclose that the stream files are interleaved. However, Kaneshige discloses an information storage medium, wherein the stream files are interleaved (Kaneshige: Figs. 9A and 9B). Since both Kim and

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Kaneshige relate to information stored on an optical disk, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the stream file layout of Kaneshige with the medium of Kim in order to record multiple stories or scenes on an optical disk in such a way that, at playback time, data will become convenient to handle (Kaneshige: column 1, lines 48-50).

Re **claim 3**, Kim does not specifically disclose that the stream files associated with the particular reproduction path are interleaved between the stream files associated with the common reproduction path portions. However, Kaneshige discloses that the stream files associated with the particular reproduction path are interleaved between the stream files associated with the common reproduction path portions (Kaneshige: Figs. 9A and 9B). Since both Kim and Kaneshige relate to information stored on an optical disk, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the stream file layout of Kaneshige with the medium of Kim in order to record multiple stories or scenes on an optical disk in such a way that, at playback time, data will become convenient to handle (Kaneshige: column 1, lines 48-50).

Re **claim 16**, Kim does not specifically disclose that only one stream file is associated with each particular portion representing a same time period of the video data stream. However, Kaneshige discloses that only one stream file is associated with each particular portion representing a same time period of the video data stream (Kaneshige: Figs. 3B and 6; column 7, lines 48-57). Since both Kim and Kaneshige relate to information stored on an optical disk, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the stream file layout of

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Kaneshige with the medium of Kim in order to record multiple stories or scenes on an optical disk in such a way that, at playback time, data will become convenient to handle (Kaneshige: column 1, lines 48-50).

Re **claim 17**, Kim does not specifically disclose that the video data stream is represented by; and each map maps presentation time stamps to packet addresses. However, Kaneshige discloses that the video data stream is represented by packets (Kaneshige: Fig. 31); and each map maps presentation time stamps to packet addresses (Kaneshige: Fig. 28; column 17, lines 7-13, the presentation order correlates to entry points). Since both Kim and Kaneshige relate to information stored on an optical disk, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the stream file layout of Kaneshige with the medium of Kim in order to record multiple stories or scenes on an optical disk in such a way that, at playback time, data will become convenient to handle (Kaneshige: column 1, lines 48-50).

Claim 18 has been analyzed and rejected with respect to claim 17 above.

Claim 19 has been analyzed and rejected with respect to claim 3 above.

Claim 22 has been analyzed and rejected with respect to claim 3 above.

Claim 25 has been analyzed and rejected with respect to claim 3 above.

Claim 28 has been analyzed and rejected with respect to claim 3 above.

Re **claim 32**, Kim does not specifically disclose that the playlist file includes at least one indicator for indicating a reproduction order of the common and particular reproduction path. However, Kaneshige discloses that the playlist file includes at least one indicator for indicating a reproduction order of the common and particular reproduction path (Kaneshige: column 16, lines 21-27). Since both Kim and Kaneshige relate to information stored on an optical disk, one of ordinary skill in the art at the time of the invention would have found it obvious to combine the stream file layout of Kaneshige with the medium of Kim in order to record multiple stories or scenes on an optical disk in such a way that, at playback time, data will become convenient to handle (Kaneshige: column 1, lines 48-50).

7. Claims 4-11, 20-21, 23-24, 26-27, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US 20040068606 A1) in view of Kaneshige et al. (US 6360055 B1) in view of Inoshita et al. (US 7024102 B1, hereinafter referred to as “Inoshita”).

Re **claim 4**, neither Kim nor Kaneshige specifically disclose that the stream files have a size to prevent a reproducing apparatus buffer from under-flowing during reproduction of the stream files. However, Inoshita discloses an image data reproducing apparatus in which image data is reproduced from a computer readable medium, which stores multiple camera angles (Inoshita: Fig. 9) wherein all video objects are the same size (Inoshita: column 10, lines 52-56) and a buffer is managed to prevent either overflow or underflow (Inoshita: column 5, lines 45-54). Since Kaneshige and

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Inoshita relate to processing image data stored on a disc, where the video objects (or cells) are interleaved from multiple camera angles, one of ordinary skill in the art at the time of the invention would have found it obvious to combine their teachings in order to reproduce multiple camera angles simultaneously for enhanced viewing (Inoshita: column 2, lines 27-32).

Re **claim 5**, arguments analogous to those presented for claim 4 are applicable to claim 5, and, therefore, claim 5 has been analyzed and rejected with respect to claim 4 above.

Re **claim 6**, the combined system of Kim, Kaneshige, and Inoshita discloses that more than one stream file is associated with a same one of a common reproduction path portion and a particular reproduction path when the one of the common reproduction path portion and the particular reproduction path includes data exceeding a stream file size to prevent the reproducing apparatus buffer from over-flowing during reproduction of the stream files (Inoshita: column 10, lines 52-56, all of the video object blocks are the same size, so when the alternate angle path exceeds the size of one video object block, the path contains more than one video object block), as in the claim.

Re **claim 7**, arguments analogous to those presented for claim 4 are applicable to claim 7, and, therefore, claim 7 has been analyzed and rejected with respect to claim 4 above.

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Re **claim 8**, arguments analogous to those presented for claim 6 are applicable to claim 8, and, therefore, claim 8 has been analyzed and rejected with respect to claim 6 above.

Re **claim 9**, arguments analogous to those presented for claim 4 are applicable to claim 9, and, therefore, claim 9 has been analyzed and rejected with respect to claim 4 above.

Re **claim 10**, arguments analogous to those presented for claim 5 are applicable to claim 10, and, therefore, claim 10 has been analyzed and rejected with respect to claim 5 above.

Re **claim 11**, arguments analogous to those presented for claim 6 are applicable to claim 11, and, therefore, claim 11 has been analyzed and rejected with respect to claim 6 above.

Claim 20 has been analyzed and rejected with respect to claim 5 above.

Claim 21 has been analyzed and rejected with respect to claim 4 above.

Claim 23 has been analyzed and rejected with respect to claim 5 above.

Claim 24 has been analyzed and rejected with respect to claim 4 above.

Claim 26 has been analyzed and rejected with respect to claim 5 above.

Claim 27 has been analyzed and rejected with respect to claim 4 above.

Claim 29 has been analyzed and rejected with respect to claim 5 above.

Claim 30 has been analyzed and rejected with respect to claim 4 above.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER FINDLEY whose telephone number is (571)270-1199. The examiner can normally be reached on Monday-Friday (8:30 AM-5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on 571-272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621

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/Christopher Findley/